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**THE**  
**Surgical Instruments of the Hindus**



# THE SURGICAL INSTRUMENTS OF THE HINDUS

WITH

**A Comparative Study of the Surgical Instruments of  
the Greek, Roman, Arab and the Modern  
European Surgeons**

BY

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and Surgeons (Bengal), Member of the Asiatic Society of Bengal,  
Life Member and Professor of Botany, Indian Association  
for the Cultivation of Science, Examiner,  
Calcutta University.*

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## PREFACE

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Much trouble has been taken with our illustrations, but the author is fully conscious of their many defects. I am greatly indebted to several authors mentioned in the legends to the plates as the readers will find certain of their illustrations copied into this volume. It was found necessary in a comparative study of the surgical instruments used by the different nations of the world. It has been my wish to render due credit to all persons for the illustrations by which they may severally have contributed to the advancement of our knowledge of the subject, and I have never assumed to myself drawings, which belong to others. For those illustrations, not otherwise acknowledged, the author is solely responsible.

For his skill and patience in drawing and printing these figures I am glad to take this opportunity of thanking Mr. K. V. Seyne.

The author deems it a pleasant duty to express his thanks to the University of Calcutta for the liberality displayed in the matter of illustrations.

80, RUSSA ROAD NORTH, }  
Calcutta, February, 1914. } G. N. MUKHOPĀDHYĀYA.



## ABBREVIATIONS

- Adams : The Genuine Works of Hippocrates. Translated by Francis Adams, LL.D. in two volumes. (Sydenham Society).
- A. H. : Catalogue of Surgical Instruments and Appliances. Allen and Hanburys Ltd. 1903.
- A. S. : Catalogue of Surgical Instruments and Appliances. Arnold and Sons. 1895.
- Anderson : See Wellcome.
- B. B. : Surgical Instruments and Appliances. Burgoyne, Burbidges & Co.
- C. C. G. : Collection de Chirurgiens Grecs. Bibliothèque Nationale. Paris.
- Erichsen : The Science and Art of Surgery. By Sir John Eric Erichsen Bt., F.R.S., LL.D. Tenth Edition. 1895.
- Esmarch : The Surgeon's Handbook of the Treatment of Wounded in War. By Dr. Friedrich Esmarch.
- Heath : Minor Surgery and Bandaging. By C. Heath, F.R.C.S. Second Edition.
- I. M. G. : Indian Medical Gazette, 1904.
- K. S. : Catalogue of Surgical Instruments. Kny-Scheerer & Co.
- Milne : Surgical Instruments in Greek and Roman Times. By T. S. Milne, M.A., M.D., 1907.
- Porter : The Surgeon's Pocket-Book. The Best Treatment of Wounded in War. By Surgeon-Major T. H. Porter. 1891.
- Princep : Princep's (Thomas') Indian Antiquities.

- Swain :            Surgical    Emergencies. By W. P. Swain,  
F.R.C.S. Third Edition. 1880.
- Thakore Saheb : History of Aryan Medical Science. By H. H.  
   Sir Bhagvat Singh Jee., K.C.I.E., M.D.,  
   D.C.L., LL.D., F.R.C.P.E. Thakore Saheb  
   of Gondal. 1896.
- Waggett :        Diseases of the Nose. By E. B. Waggett,  
   M.A., M.B., B.C. 1907.
- Wellcome :      Third Report of the Wellcome Research  
   Laboratories at the Gordon Memorial College,  
   Khartoum.
- White :            The Veterinary Art. By James White. 1851.
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# CORRECTIONS

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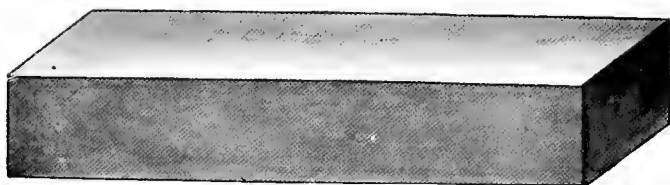
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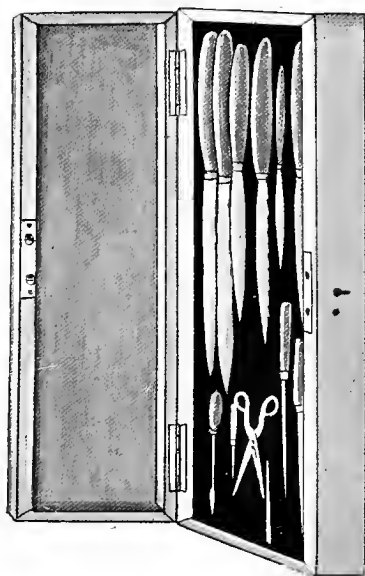


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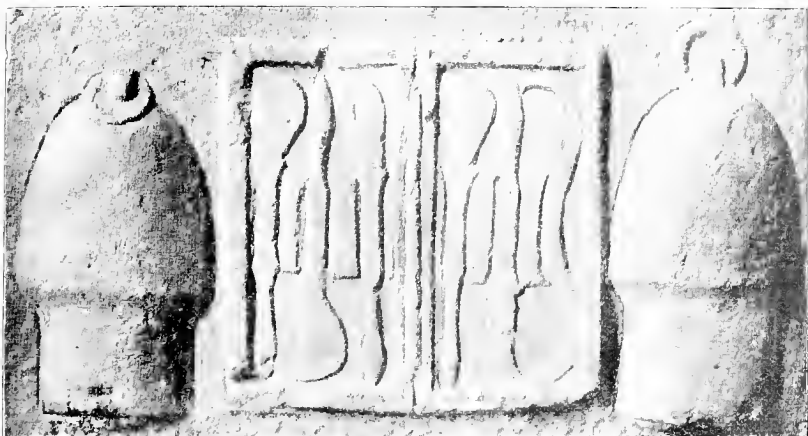
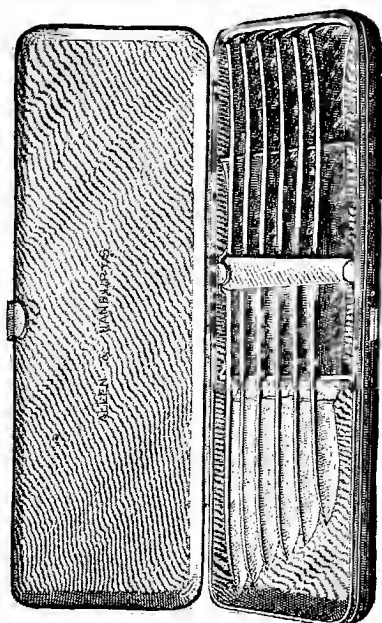
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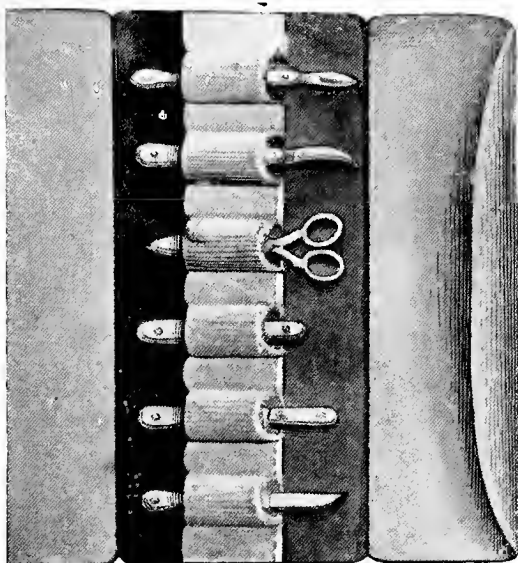


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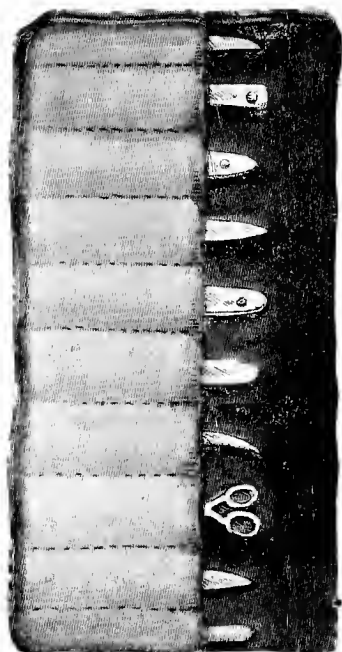
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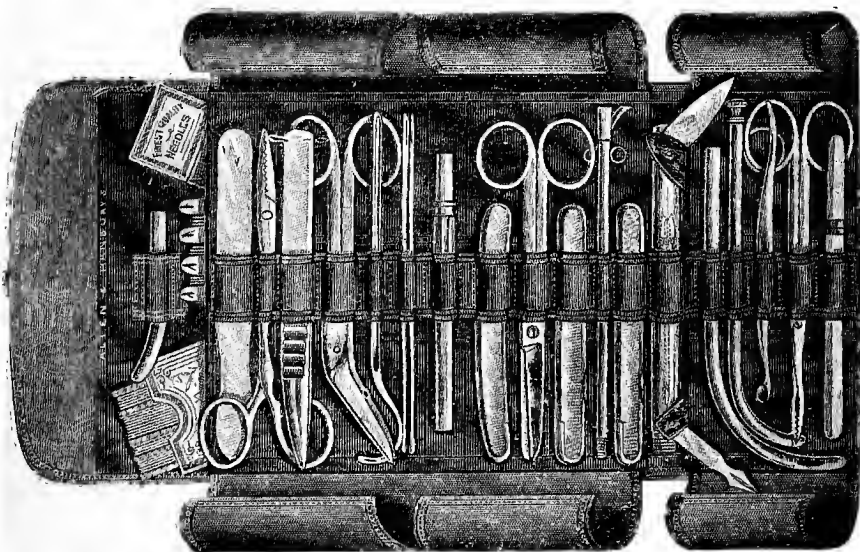
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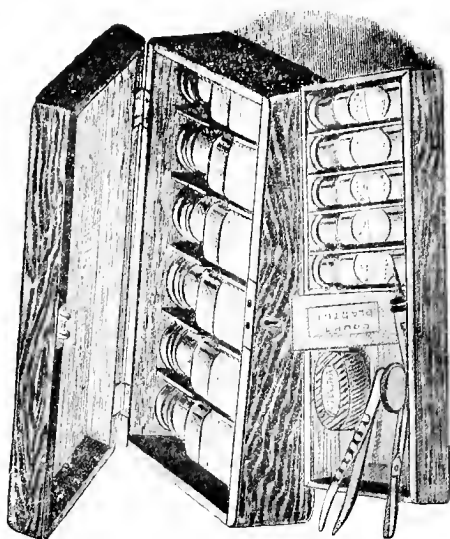


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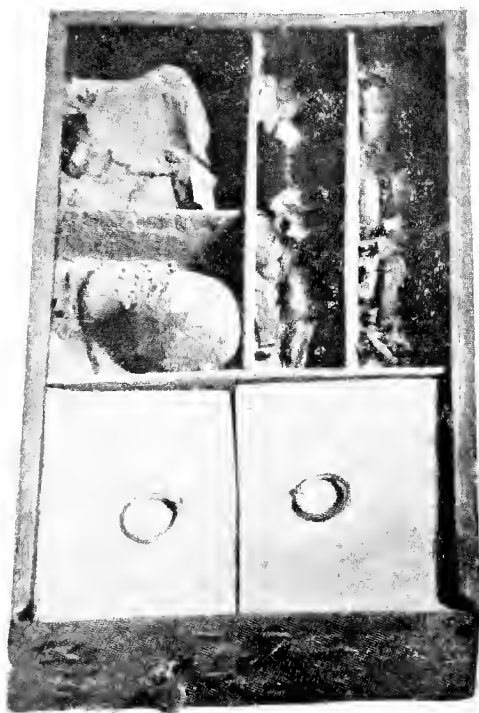
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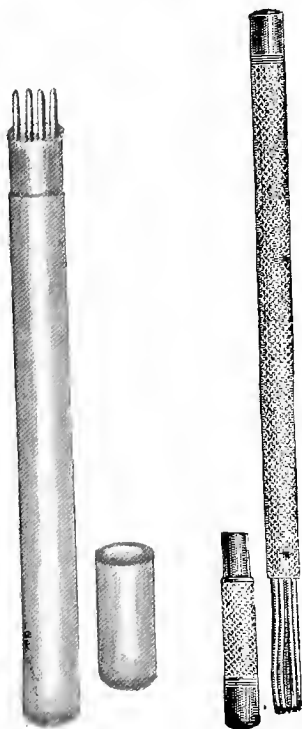
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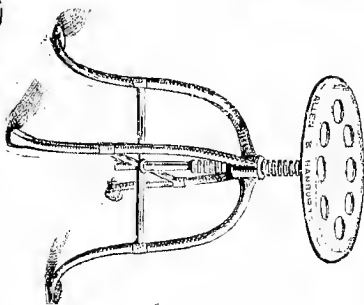
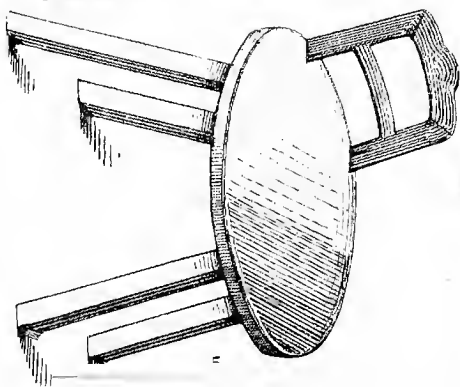
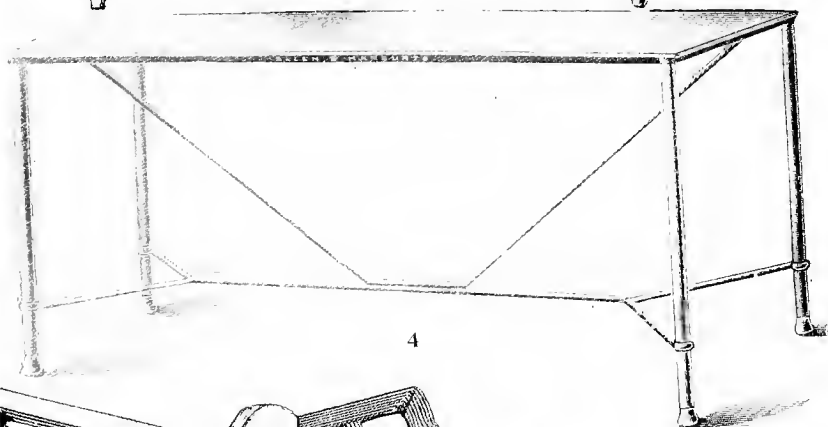
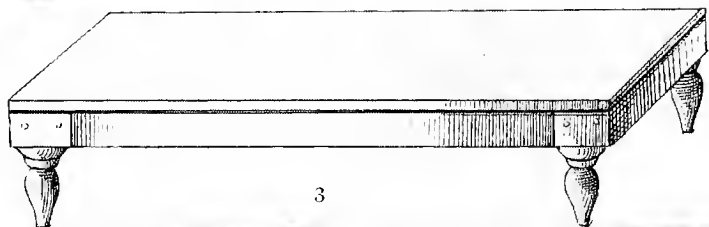
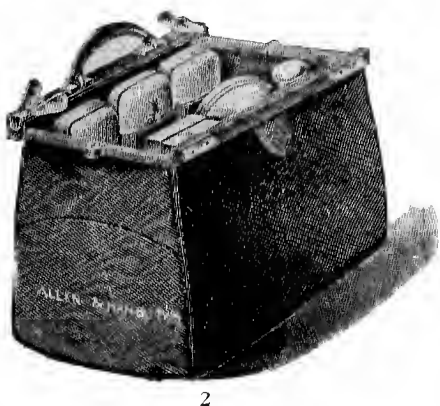
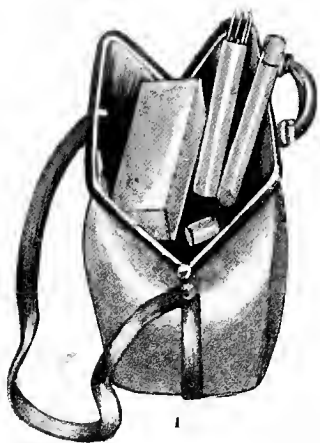






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KAPĀṬA-ŚAYANA OR FRACTURE-BED OF THE HINDUS.

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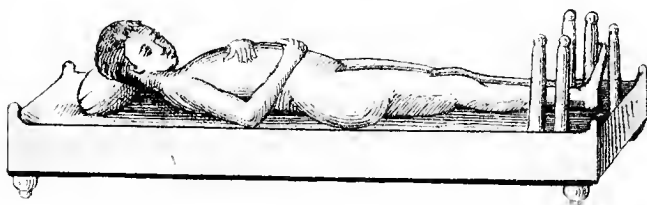
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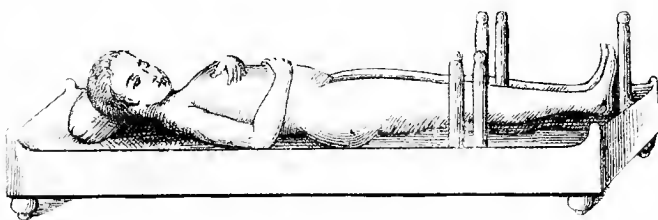


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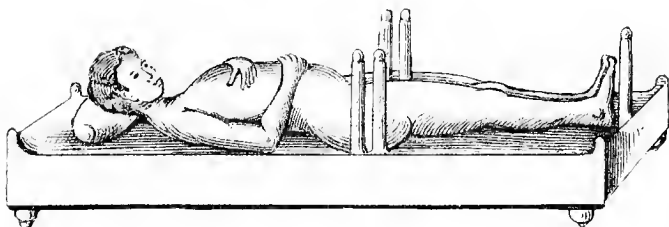
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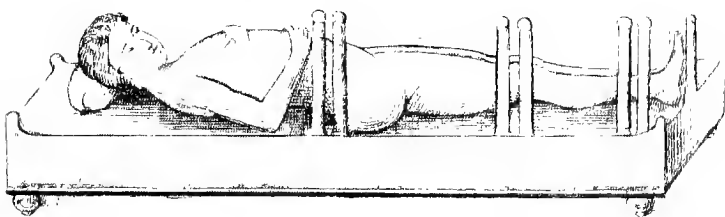




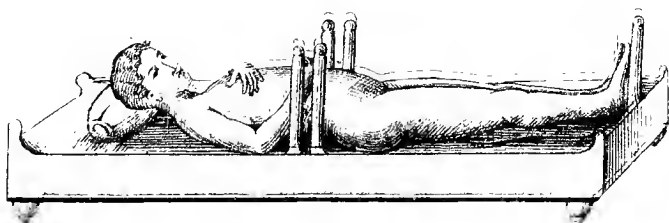
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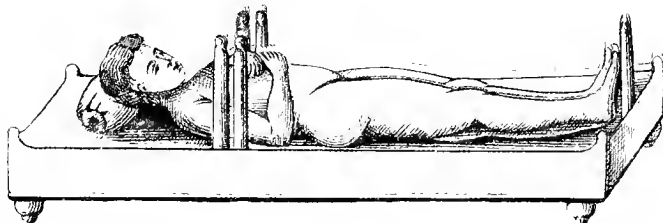
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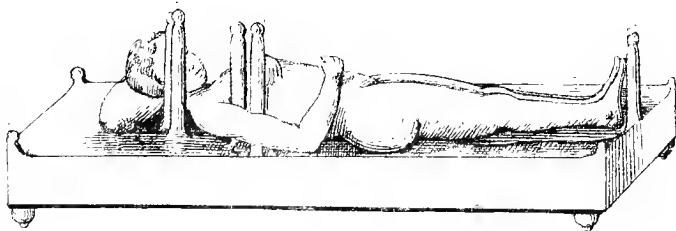
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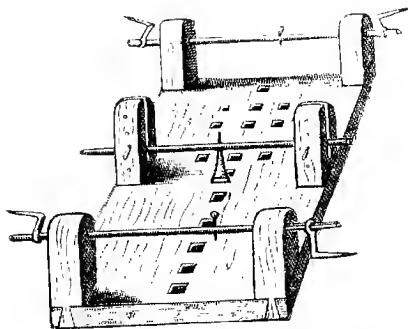
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Adams. Vol. II. Pl. IV. Fig. 1 & 2.

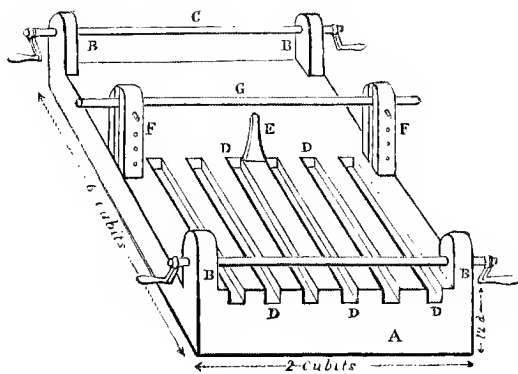


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## Plate VII.



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PLATE VIII.

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*A mistake in the figure given by M. Littré is here corrected.*

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B. Another lever, held by an assistant, put into one of the grooves of the machine, and intended to act against lever A.

C. Groove in which the end of the lever A takes its point of support.

D. The luxated member.

EE. Extension and counter-extension.

Adams. Vol. II. Pl. V. Fig. 1.

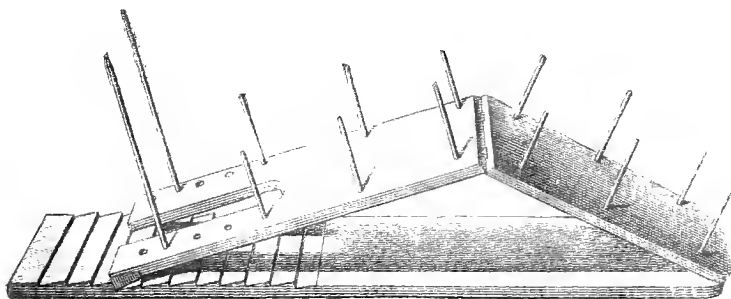
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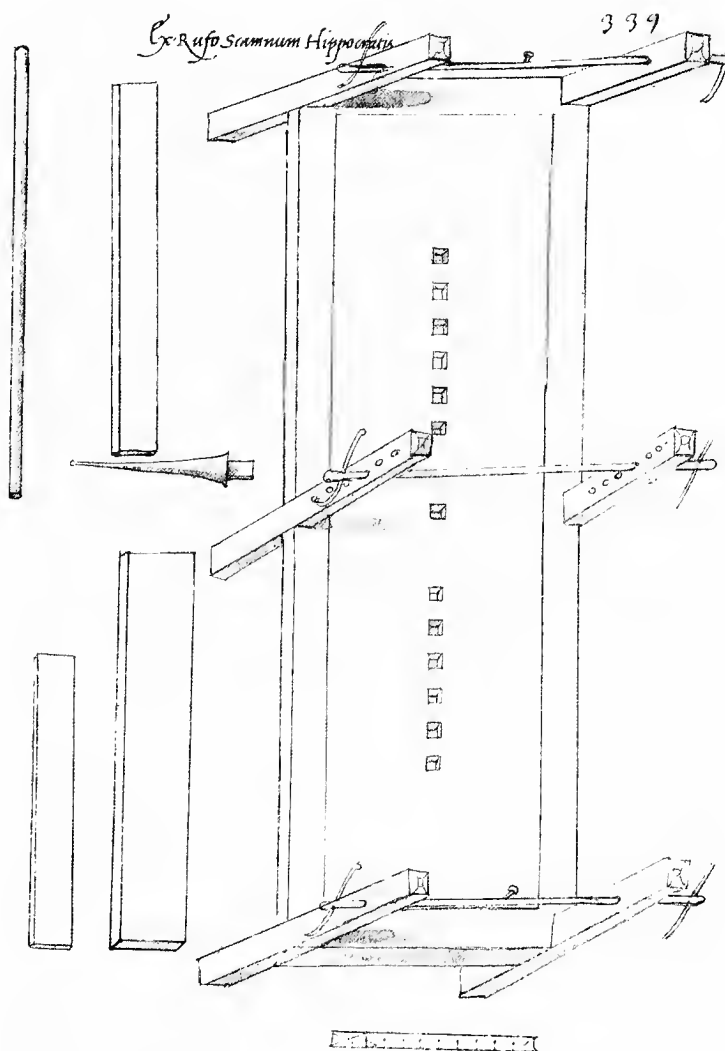






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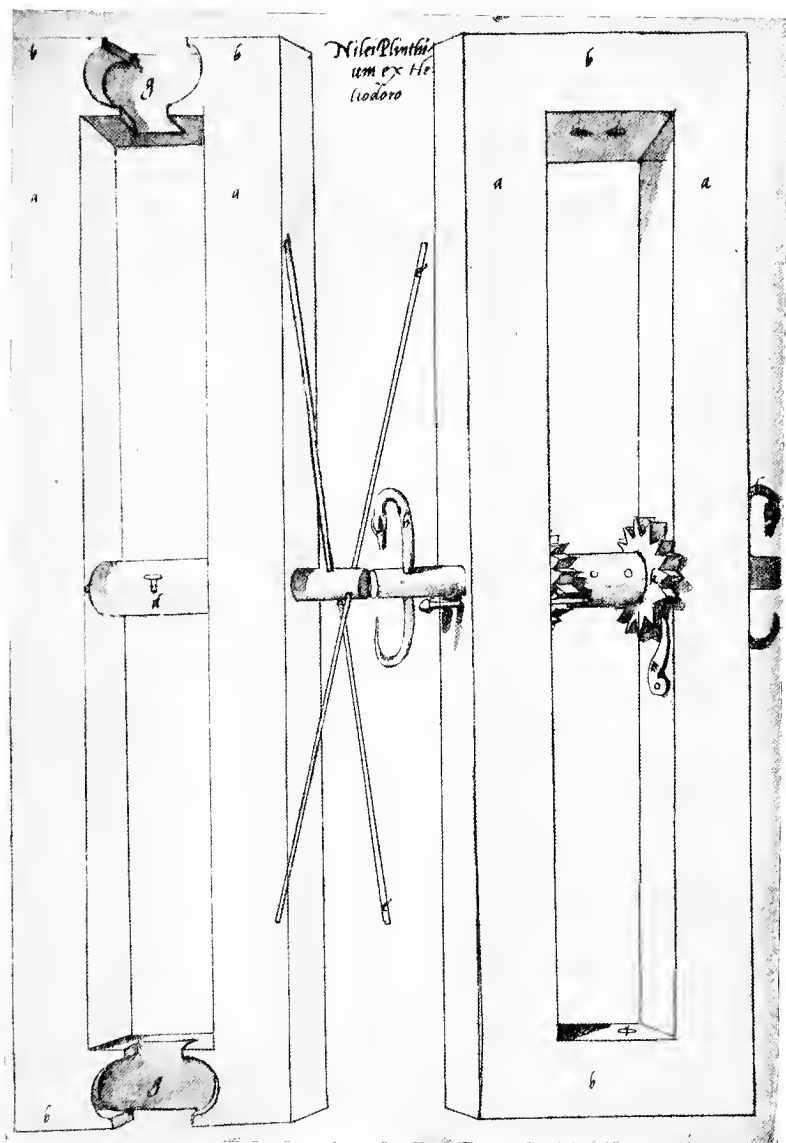






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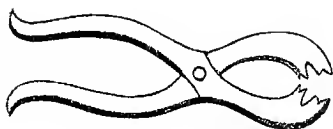
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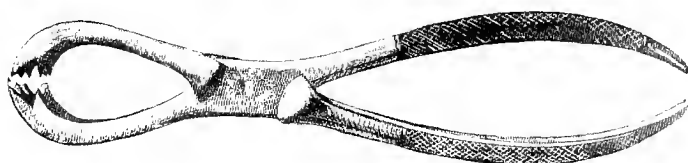
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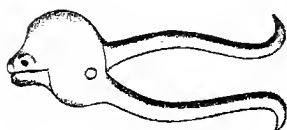
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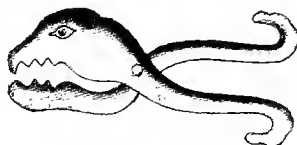
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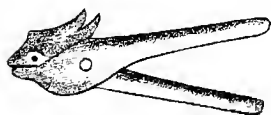
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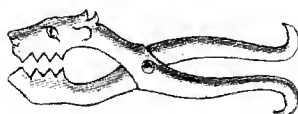
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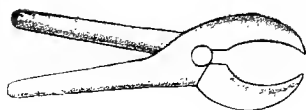
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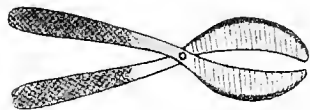
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THE SVASTIKA YANTRA OR CRUCIFORM INSTRUMENTS.

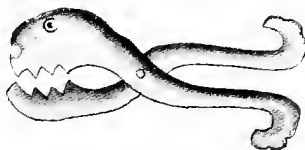
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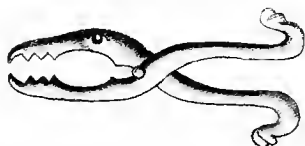
## Plate XII.



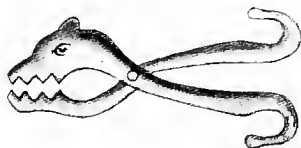
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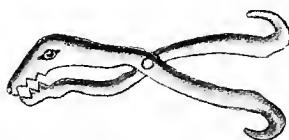
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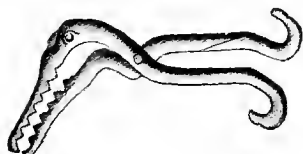
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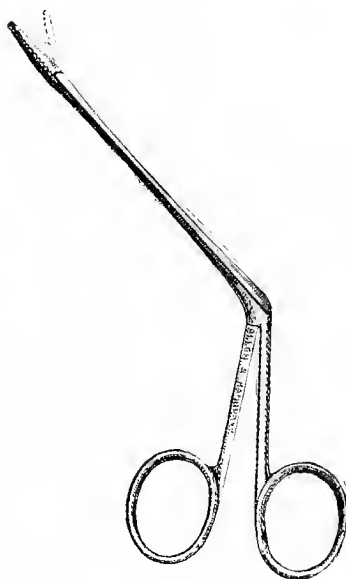
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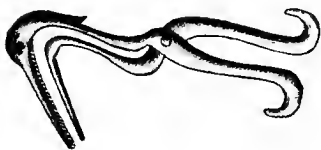
Plate XIII.



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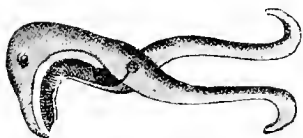
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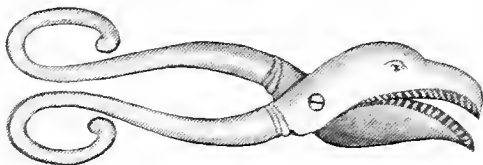
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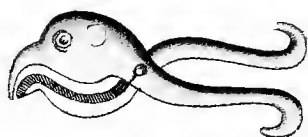
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THE SVASTIKA YANTRA OR CRUCIFORM INSTRUMENTS.

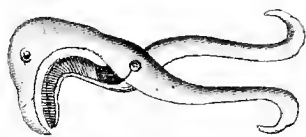
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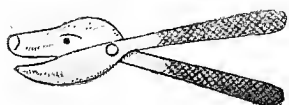
## Plate XIV.



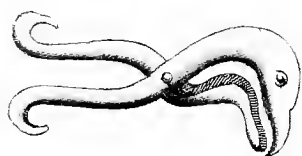
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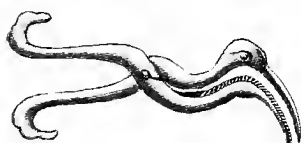
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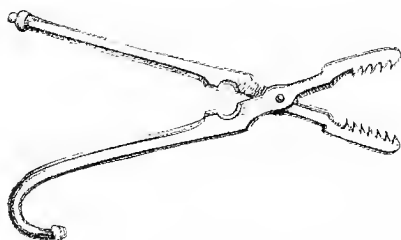
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PLATE XV.

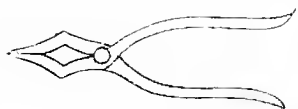
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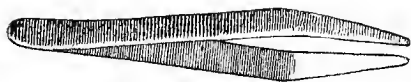
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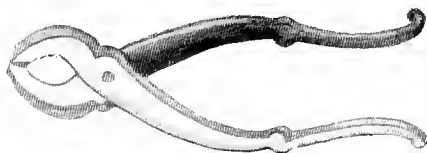
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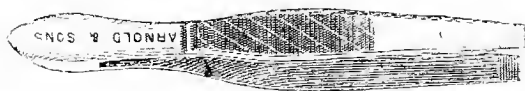
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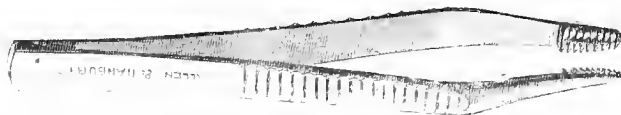
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PLATE XVIII.

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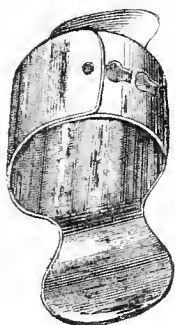
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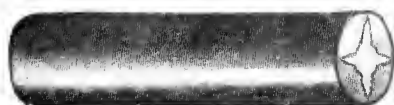
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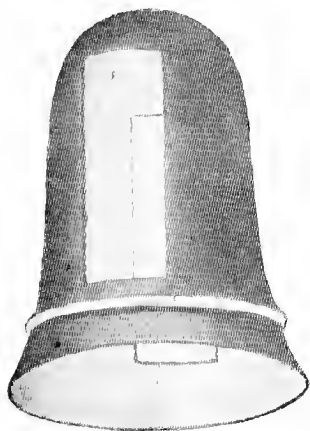
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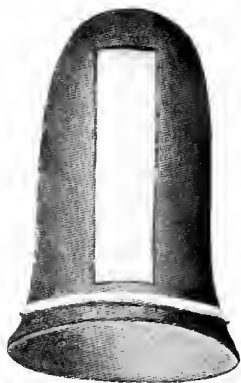


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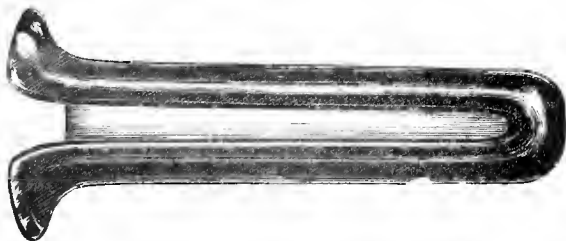
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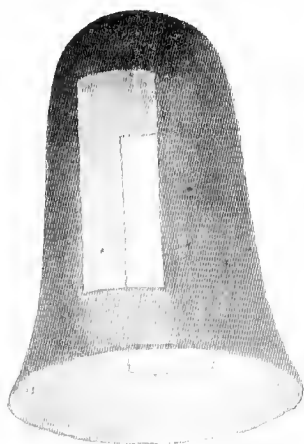
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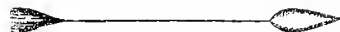
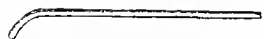
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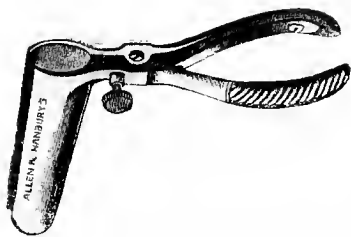


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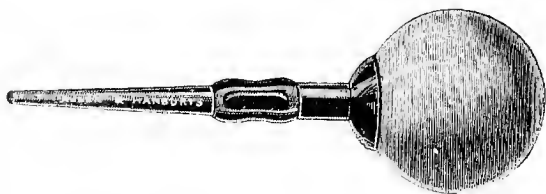
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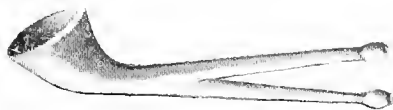
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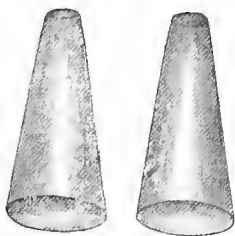
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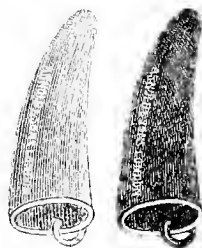
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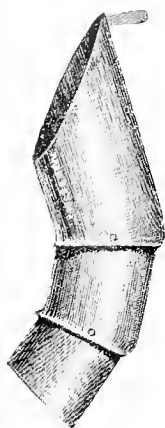
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NĀḌĪ YANTRĀ OR TUBULAR INSTRUMENTS.

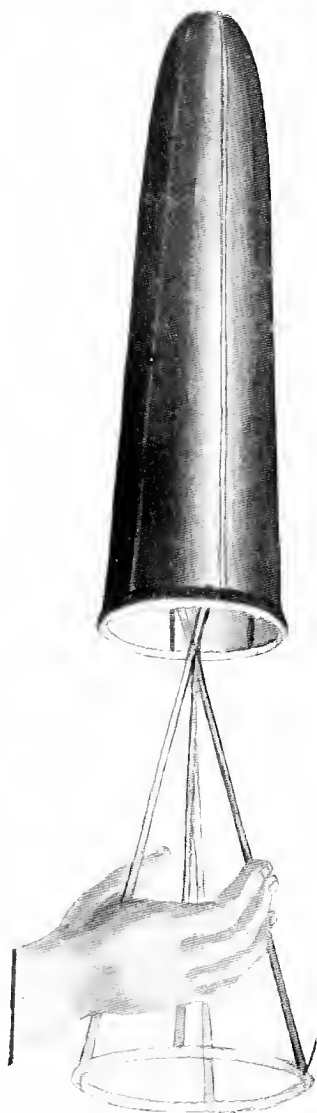
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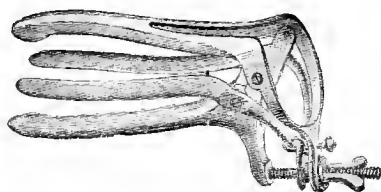


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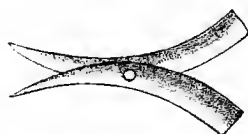
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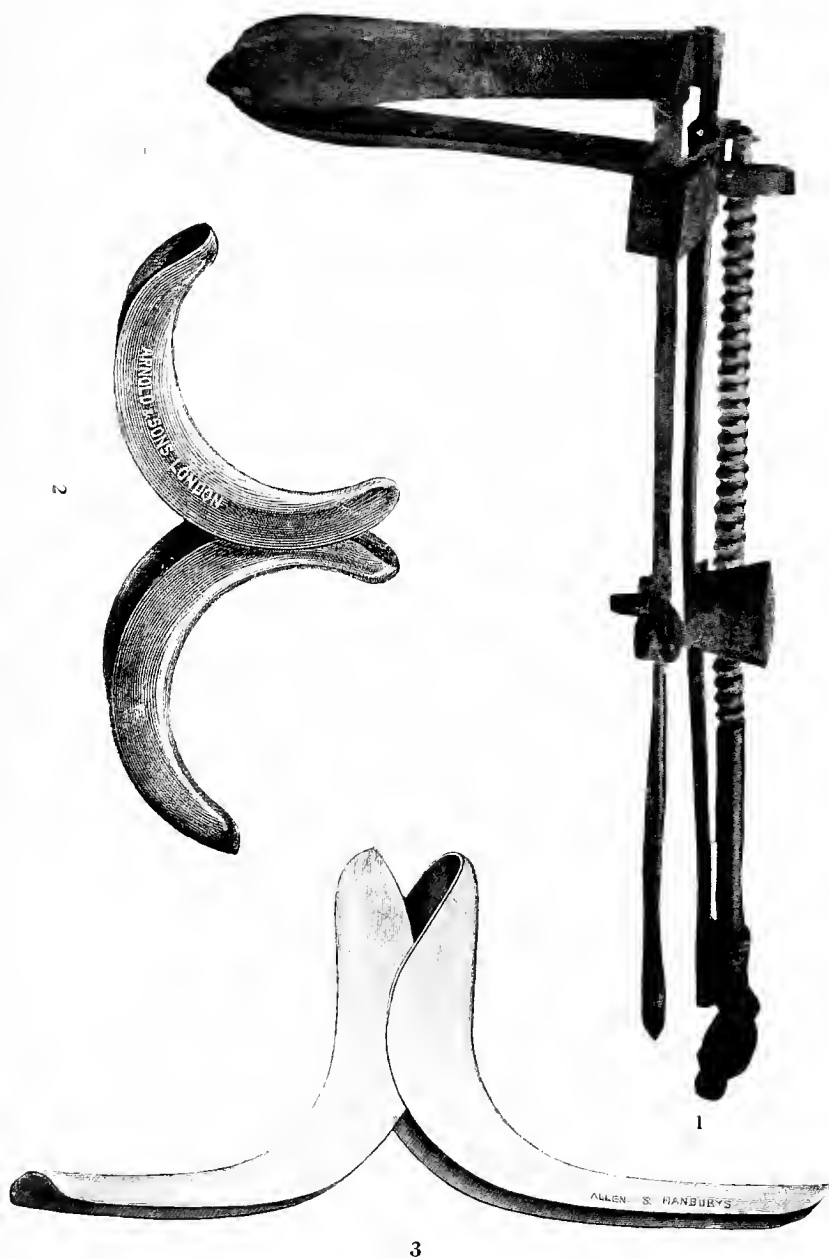






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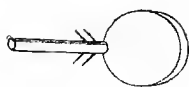


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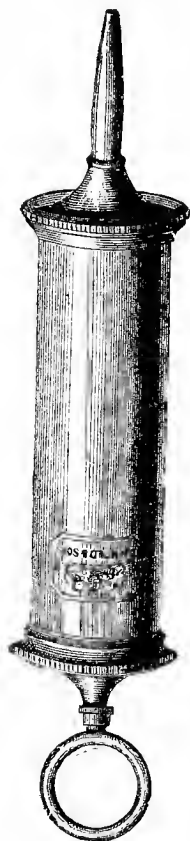
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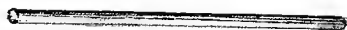
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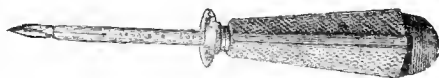
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PLATE XXVII.

THE NĀḍĪ YANTRA OF TUBULAR INSTRUMENTS.

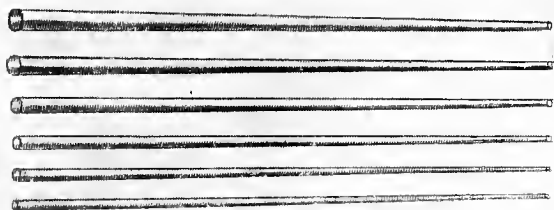
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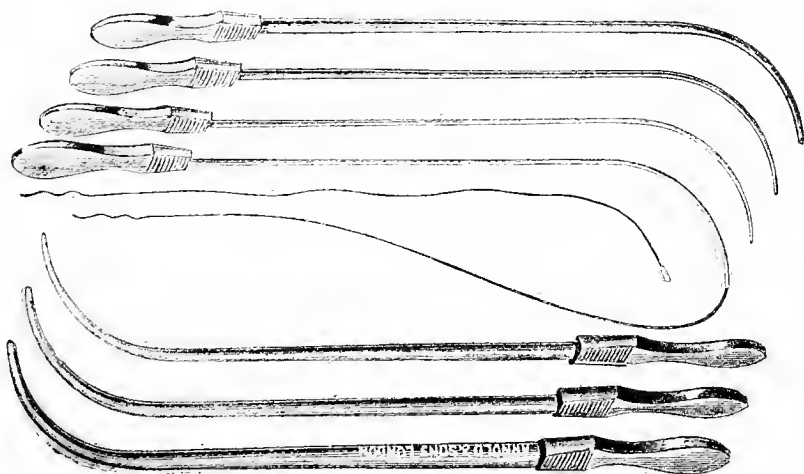


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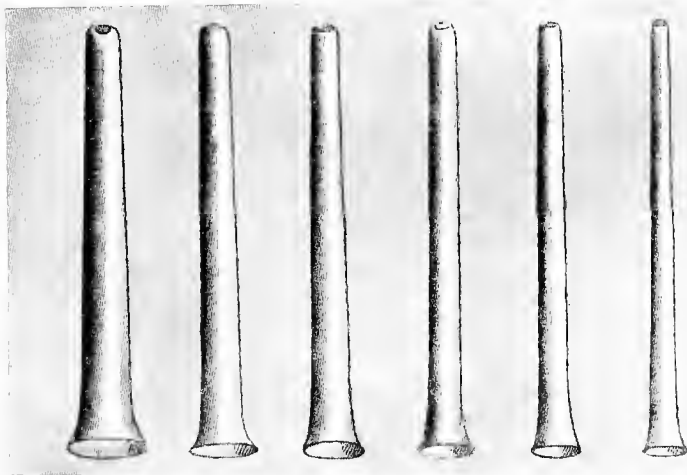
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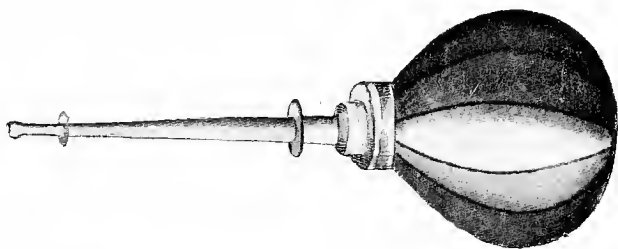
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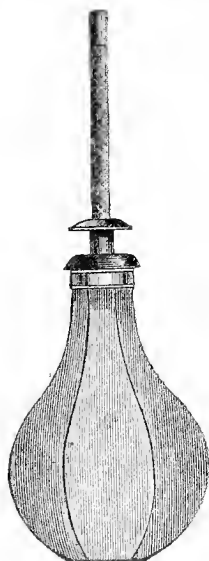
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PLATE XXX.

THE NĀṢĪ YANTRA OR TUBULAR INSTRUMENTS.  
UTTARA-VASTI.

TUBULAR INSTRUMENTS FOR THE URETHRA.

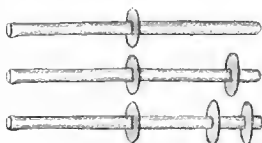
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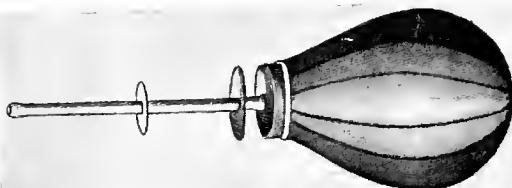
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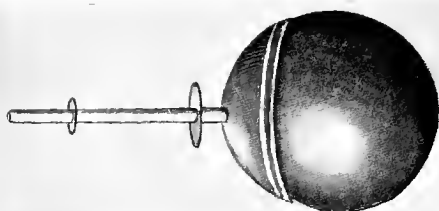
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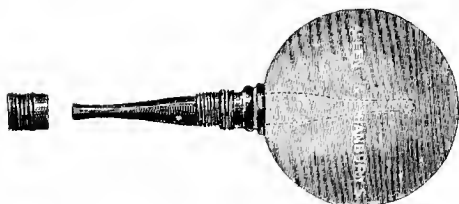
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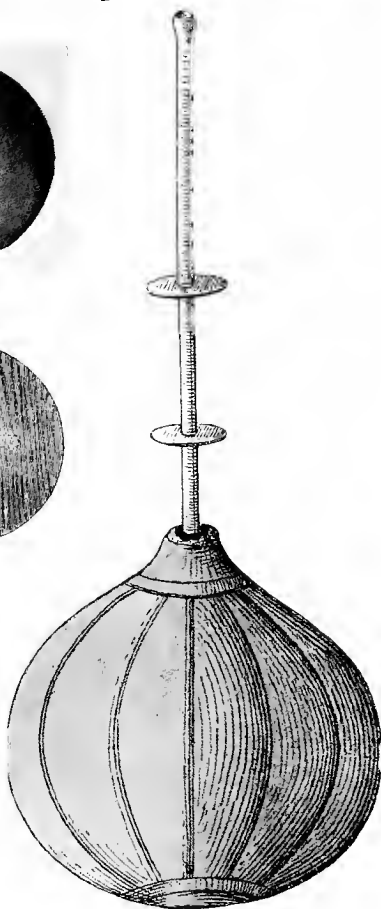
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PLATE XXXI.

THE NĀDĪ YANTRA OR TUBULAR INSTRUMENTS.

UTTARAVASTI.

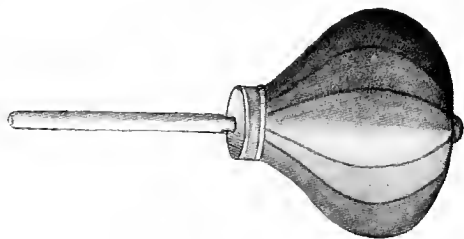
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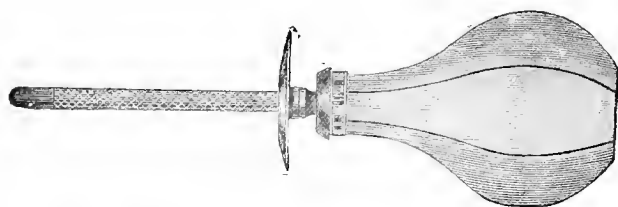


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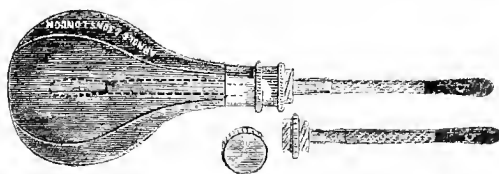
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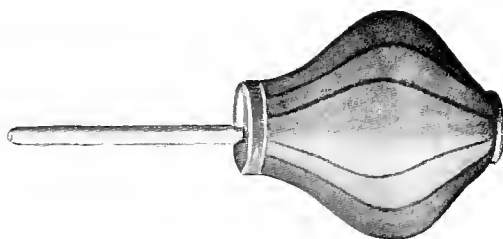






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# The Surgical Instruments of the Hindus.

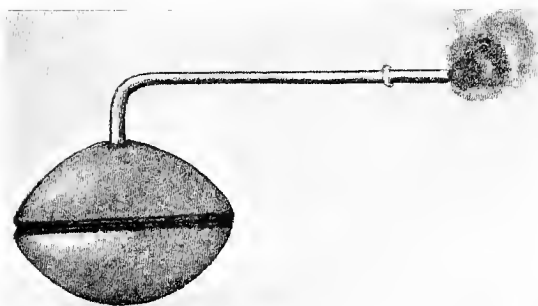
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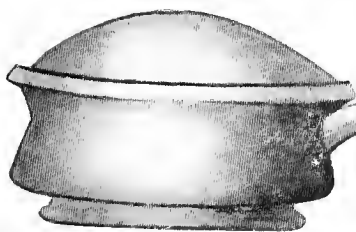
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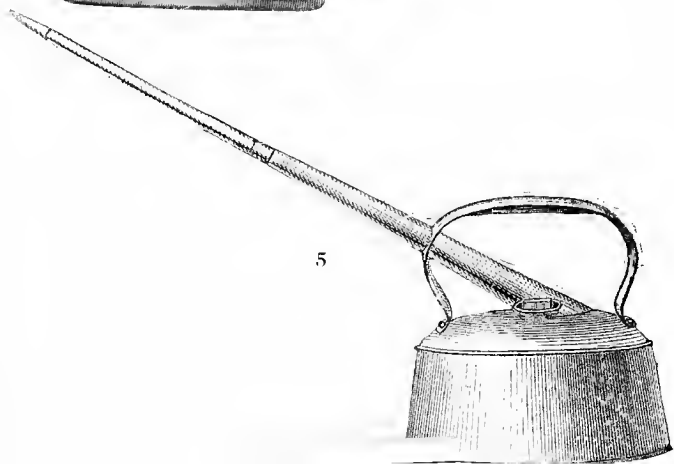
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THE NĀḌĪ YANTRA OR TUBULAR INSTRUMENTS.

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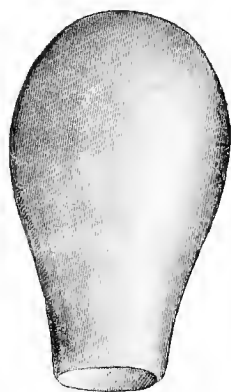
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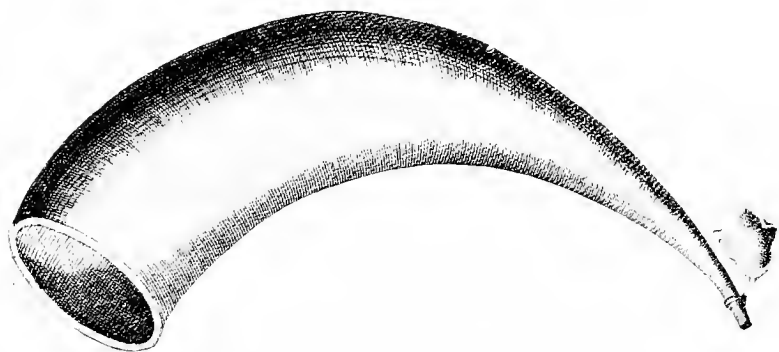
THE NĀḌĪ YANTRA OR TUBULAR INSTRUMENTS:

TUBULAR INSTRUMENTS FOR CUPPING.

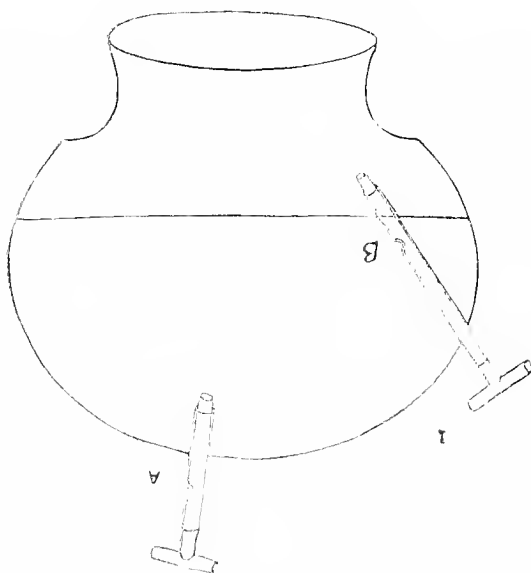
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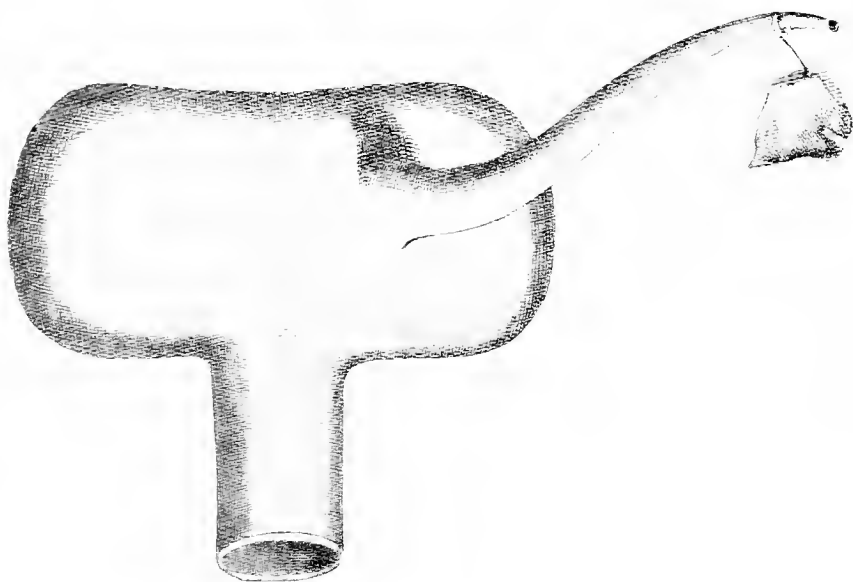
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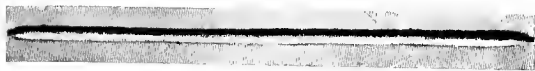
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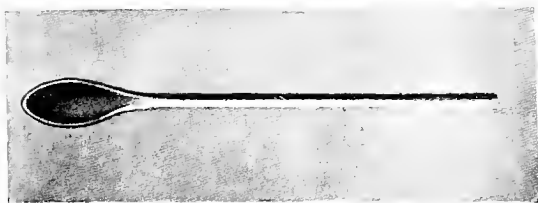
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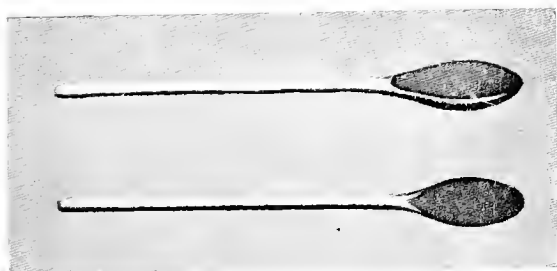
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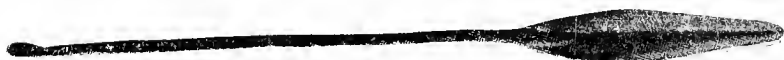
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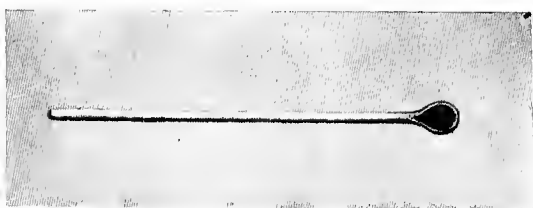
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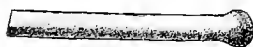
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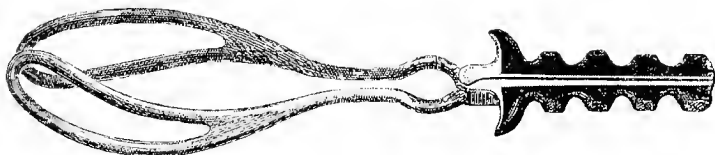
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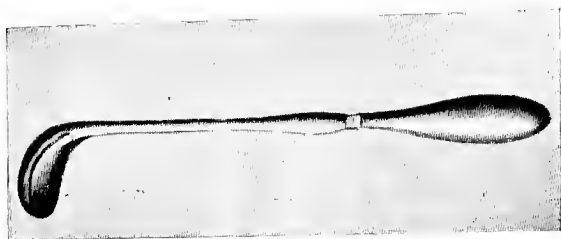
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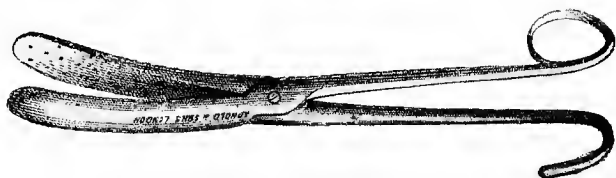
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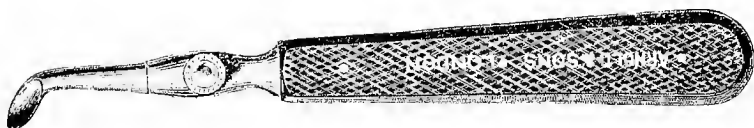
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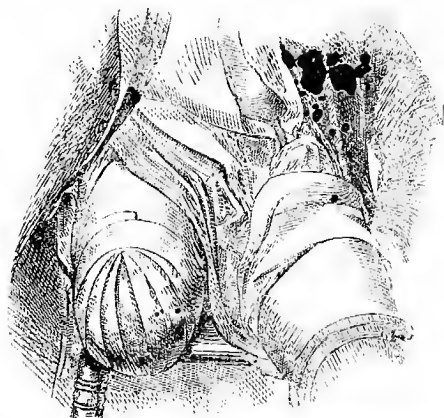
UPAYANTRA OR ACCESSORY INSTRUMENTS.

PAṬṬA OR BANDAGES.

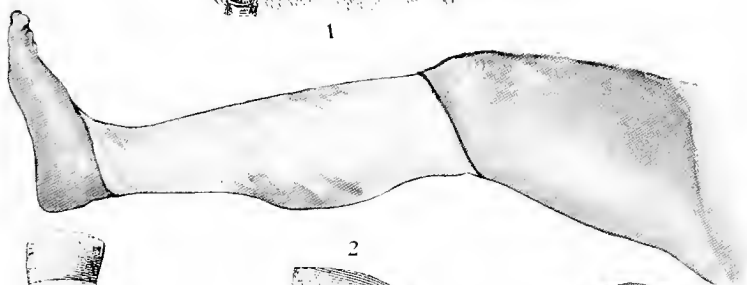
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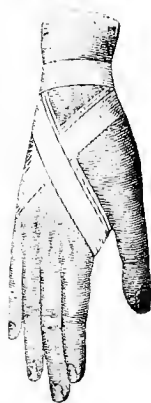
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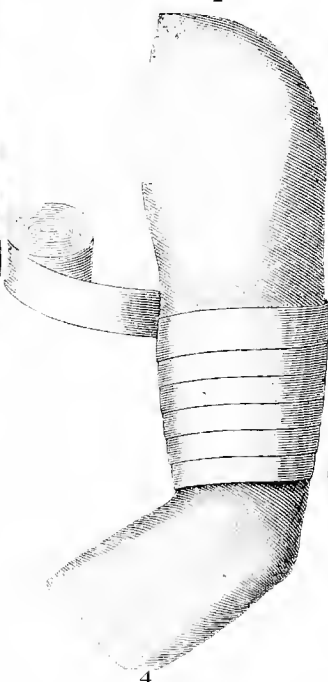
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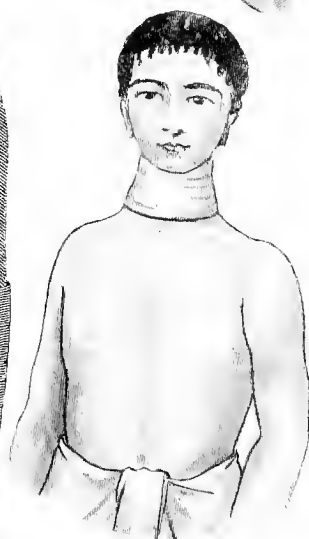
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PLATE XLIII.

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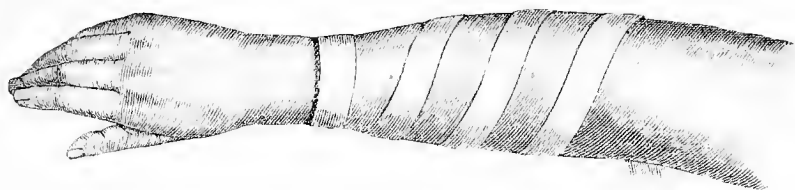
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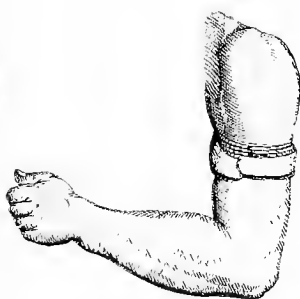


# The Surgical Instruments of the Hindus.

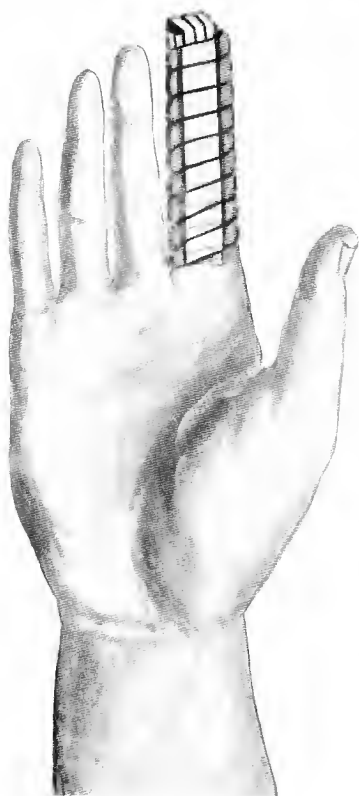
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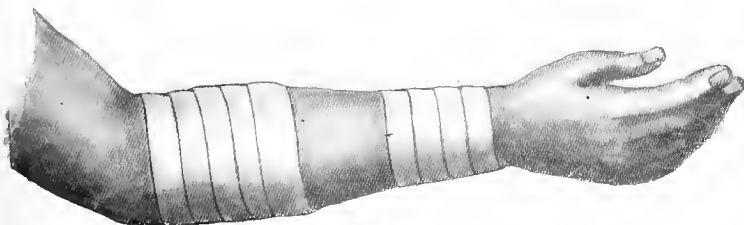
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PLATE XLIV.

UPAYANTRA OR ACCESSORY INSTRUMENTS.

PAṬṬA OR BANDAGES.

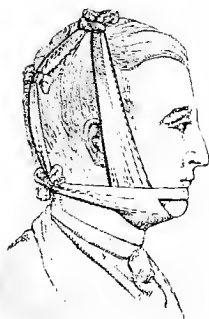
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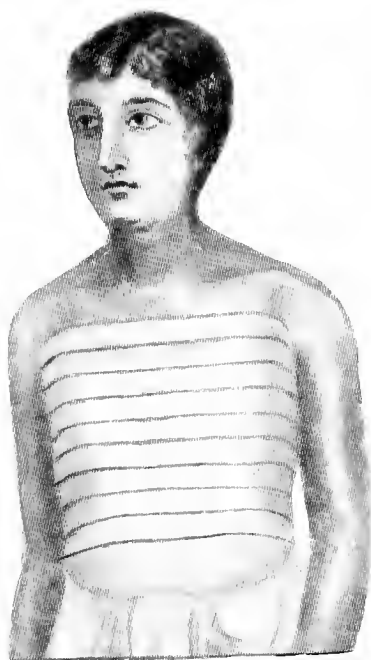
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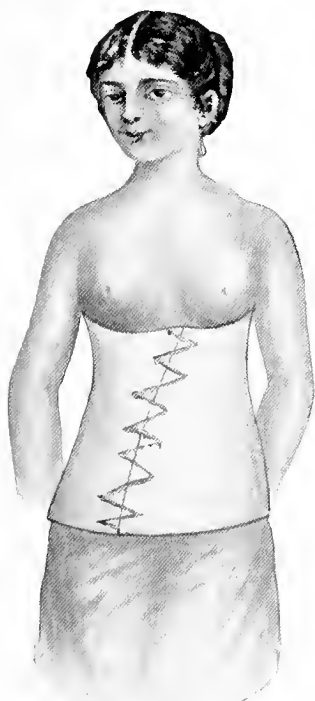
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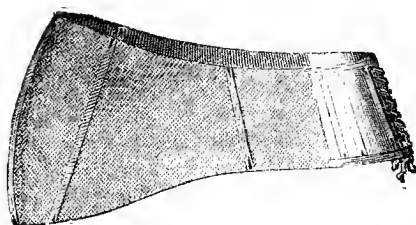
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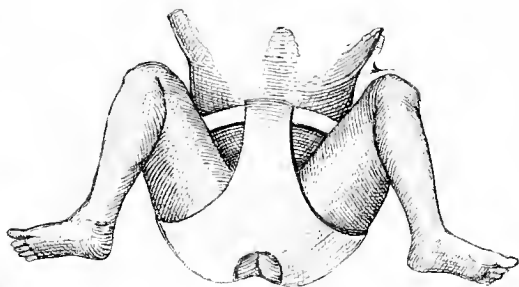
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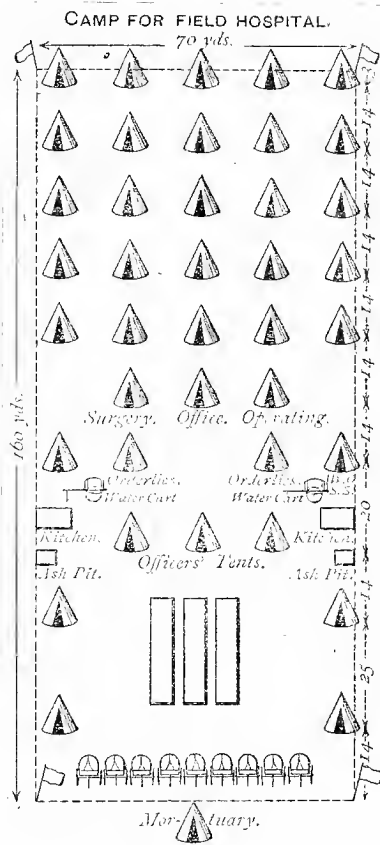






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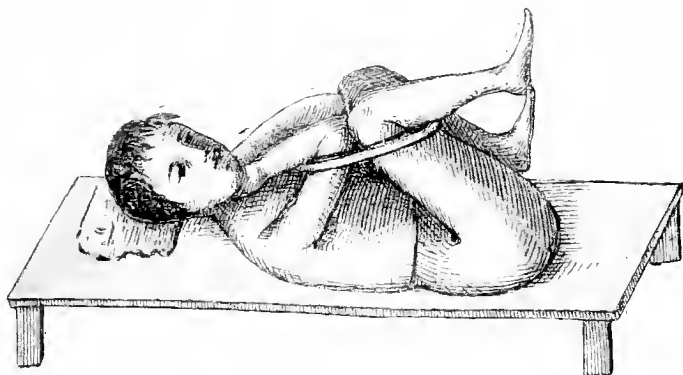
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YANTRA-ŚĀṬAKA OR BINDING APPARATUS.

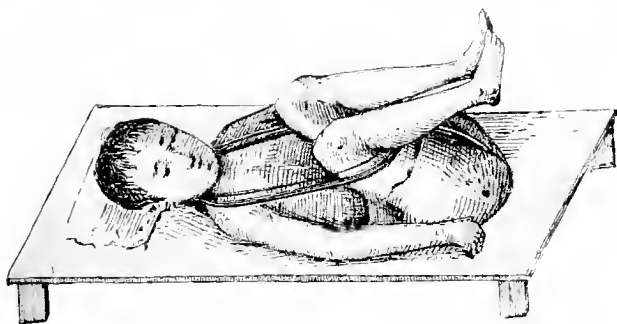
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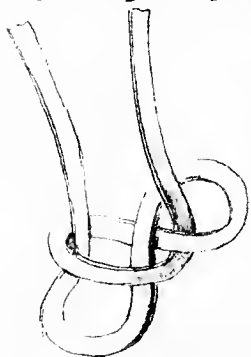


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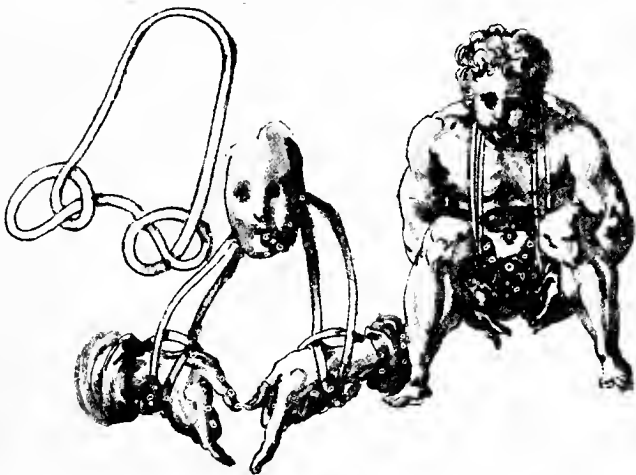
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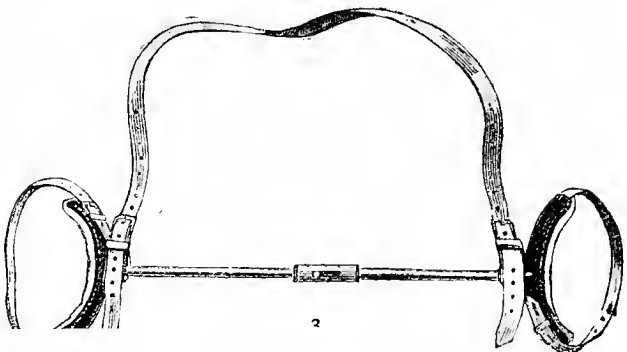
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PLATE L.

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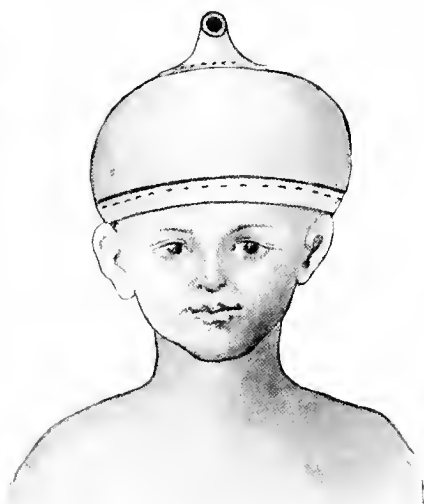
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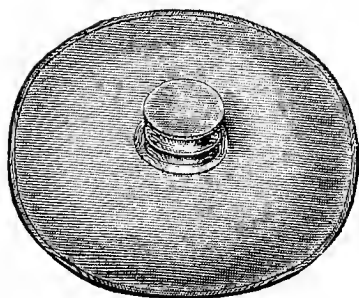
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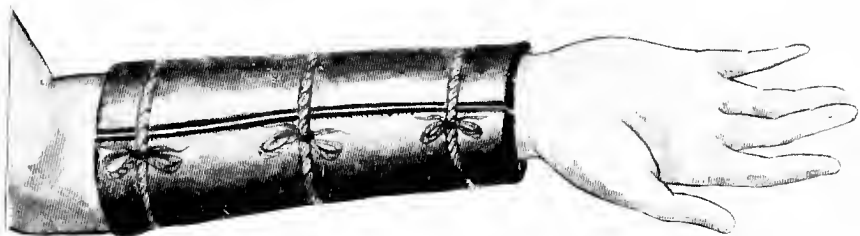
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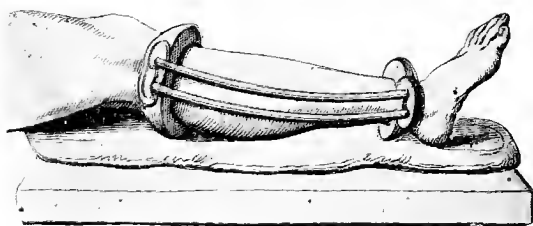
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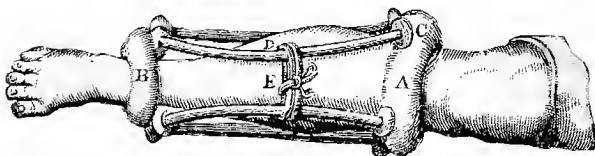
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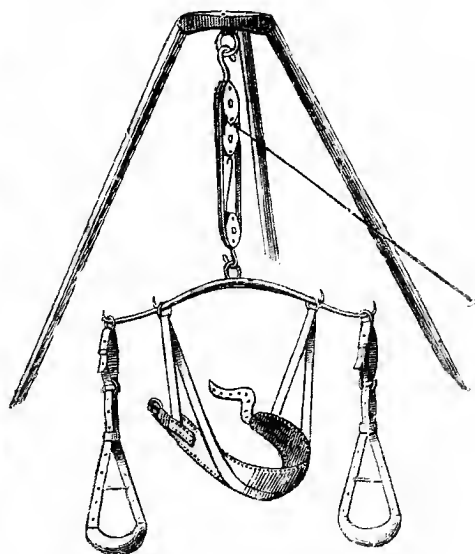


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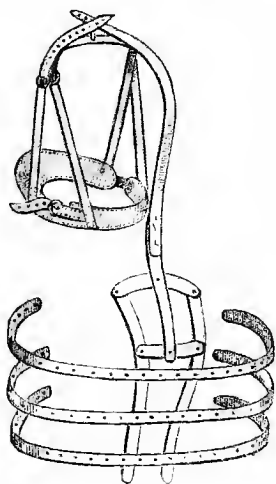
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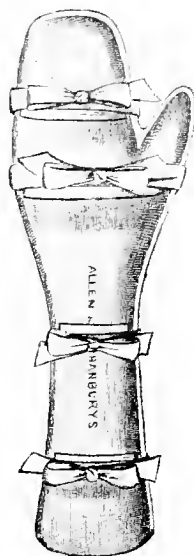
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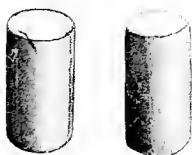
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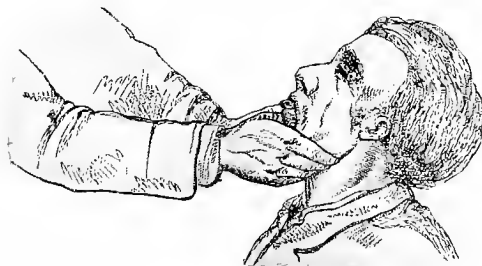


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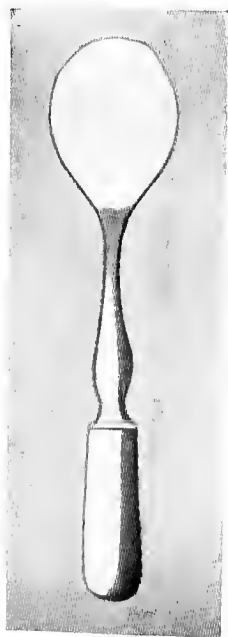
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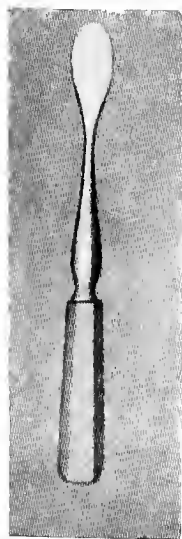
Plate LVIII.



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PLATE LIX.

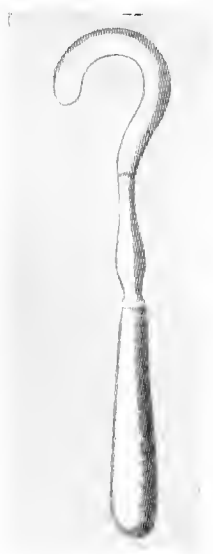
THE MAṆDALĀGRA ŚASTRA OR ROUND HEADED KNIFE.

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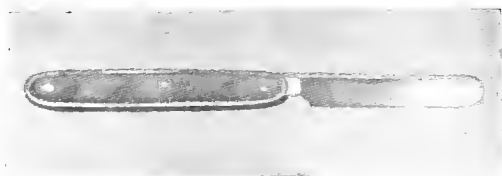
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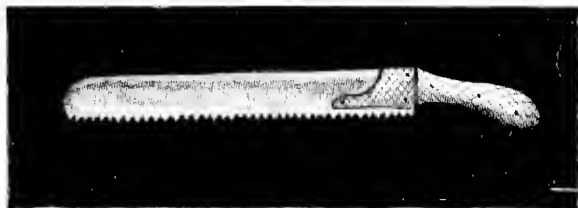




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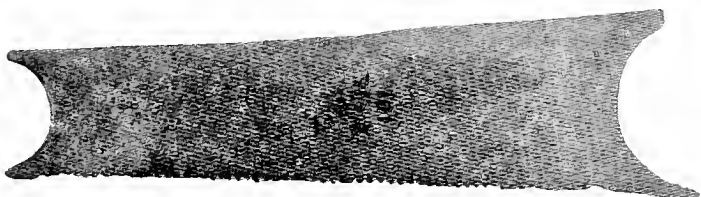
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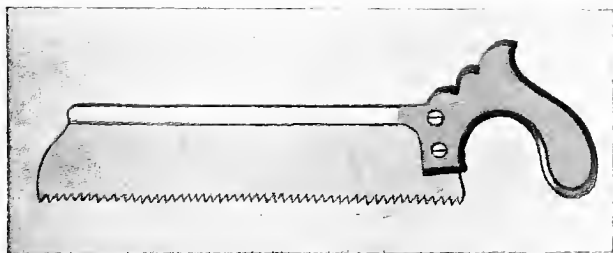
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PLATE LXI.

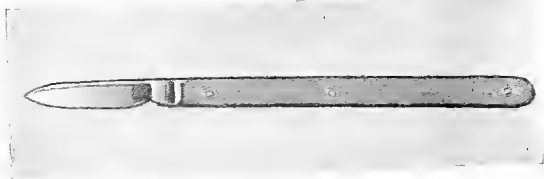
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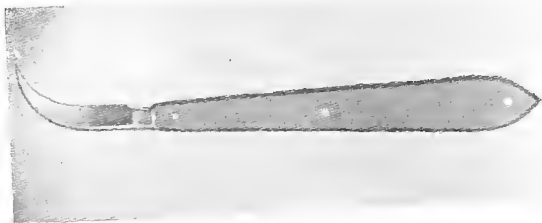


# The Surgical Instruments of the Hindus.

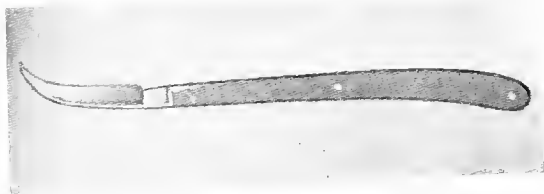
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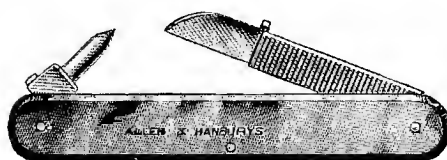
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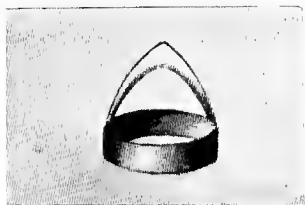
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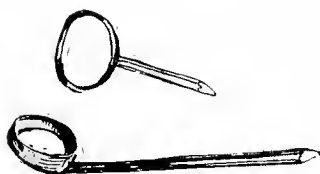
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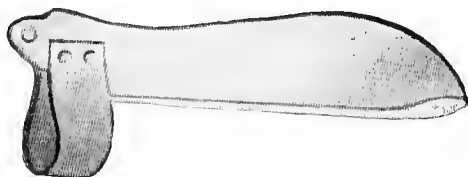
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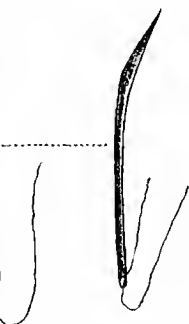
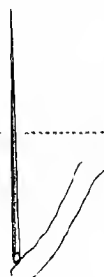
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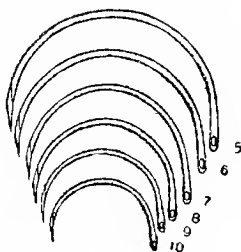
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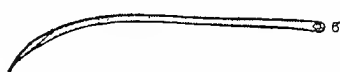
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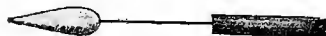
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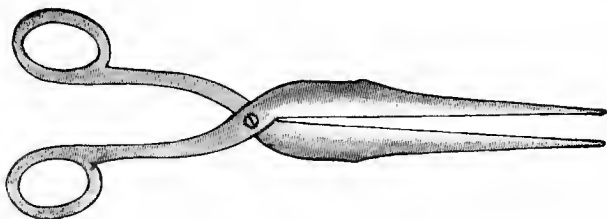
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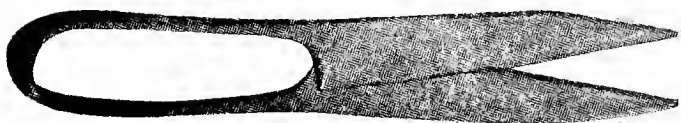
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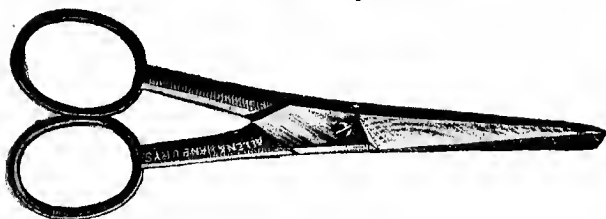
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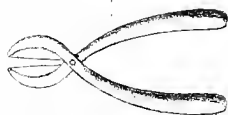
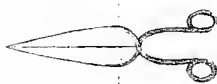
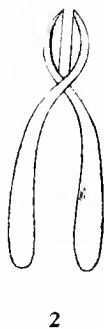
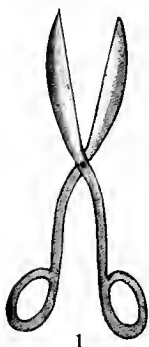
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ANTARMUKHA ŚASTRA OR SCISSORS.

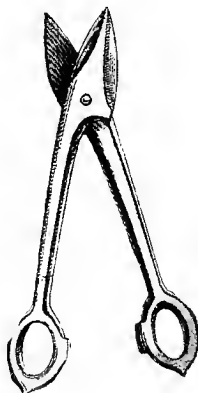
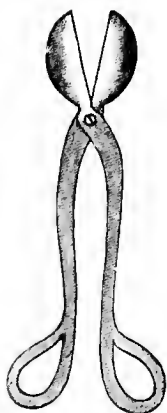
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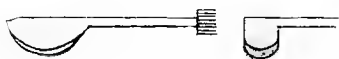
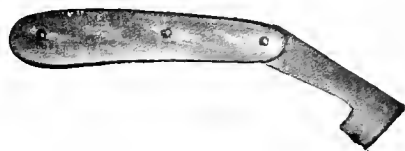
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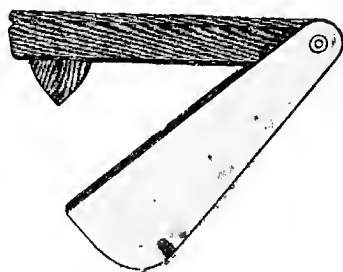
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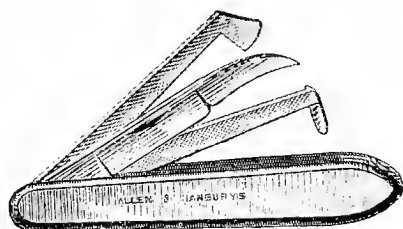
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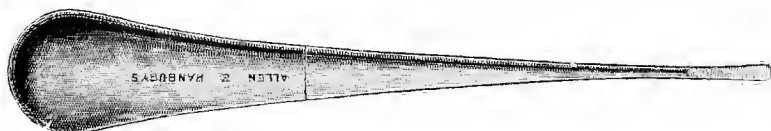
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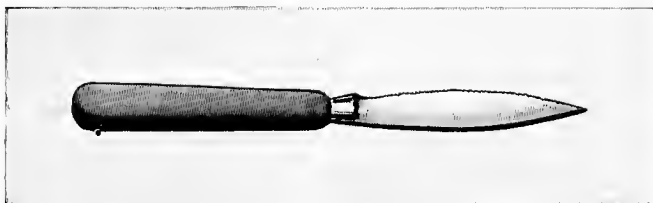
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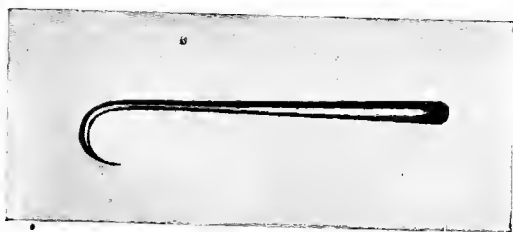
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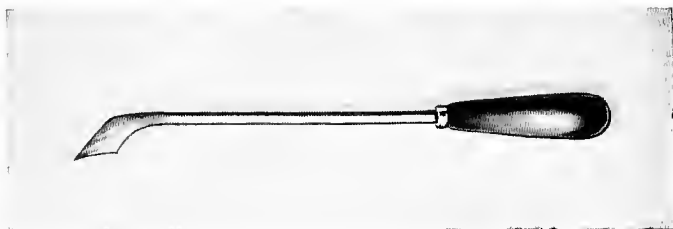
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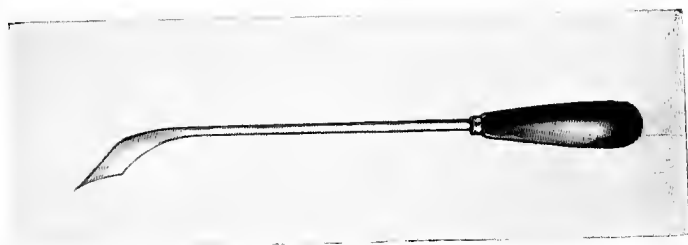
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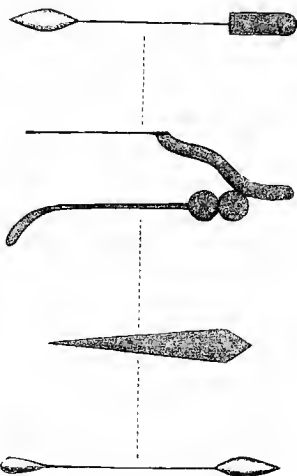
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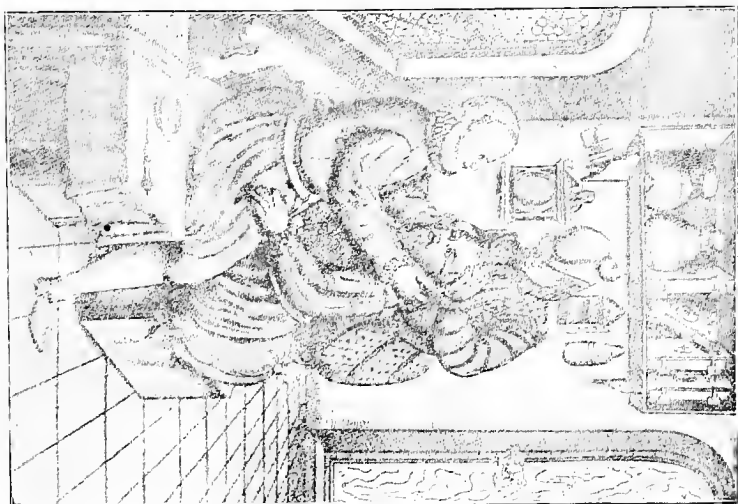
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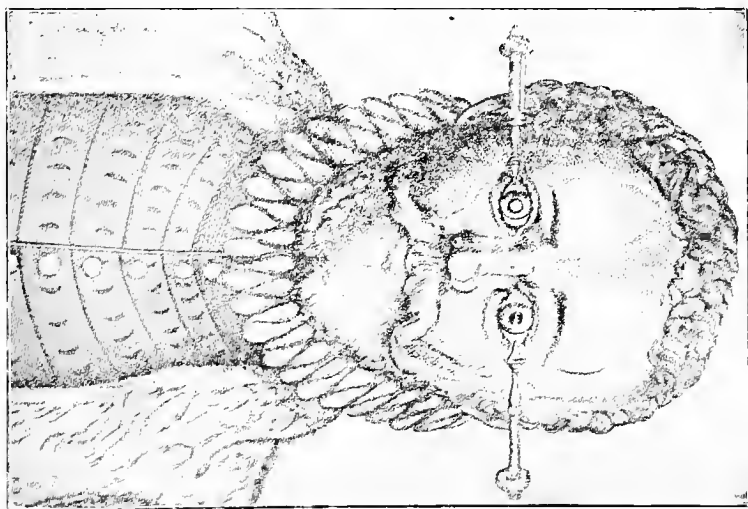


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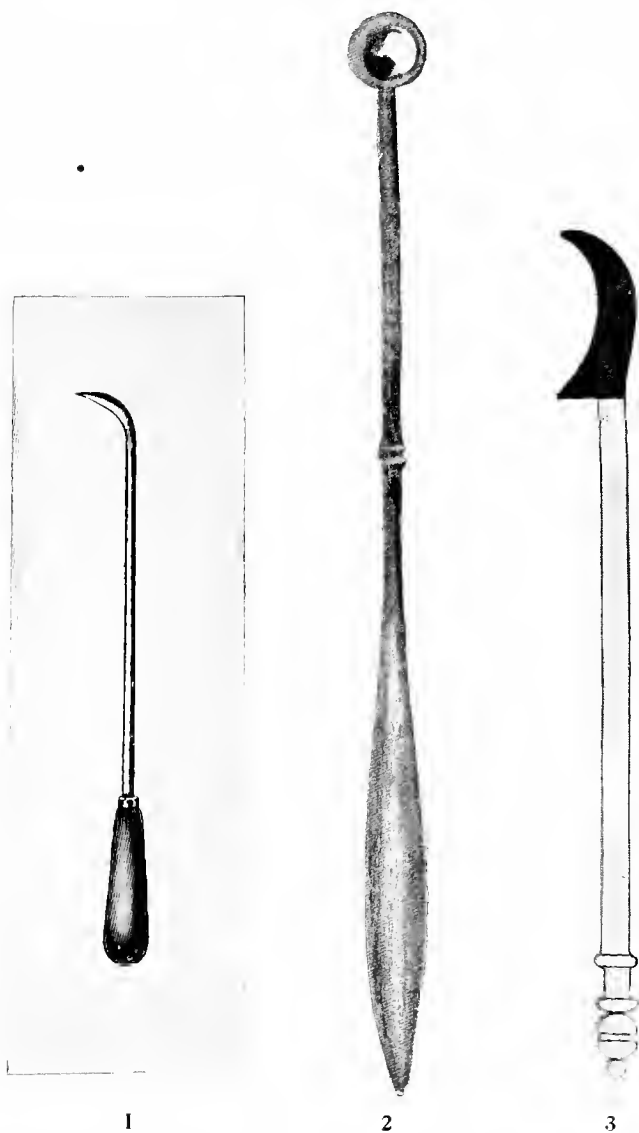






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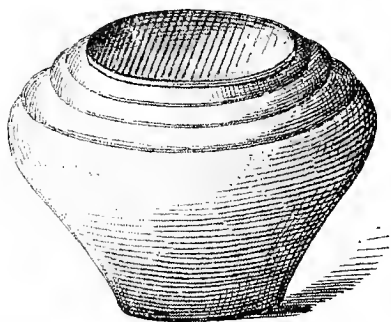
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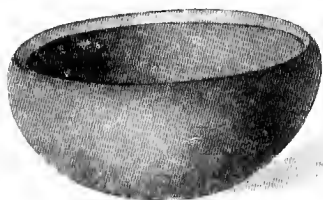


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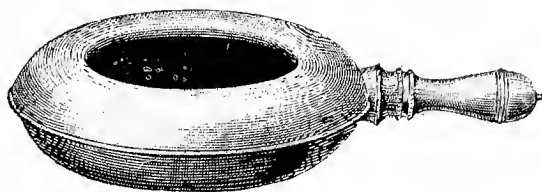
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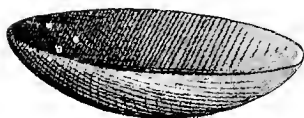
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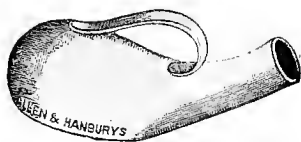
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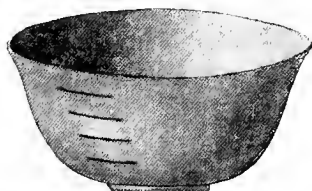
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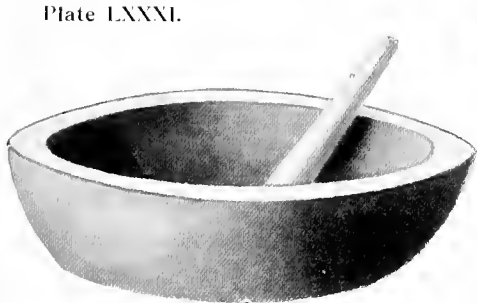
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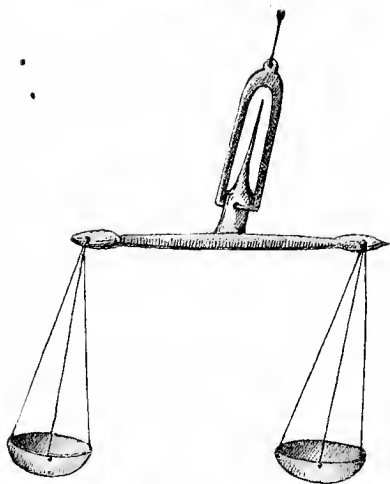
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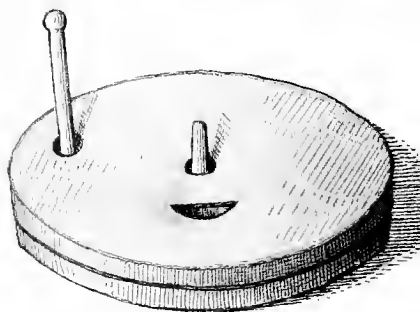
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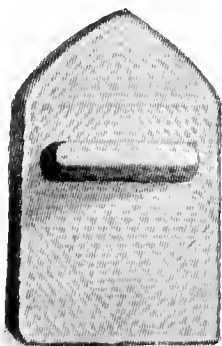
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PLATE LXXXII.

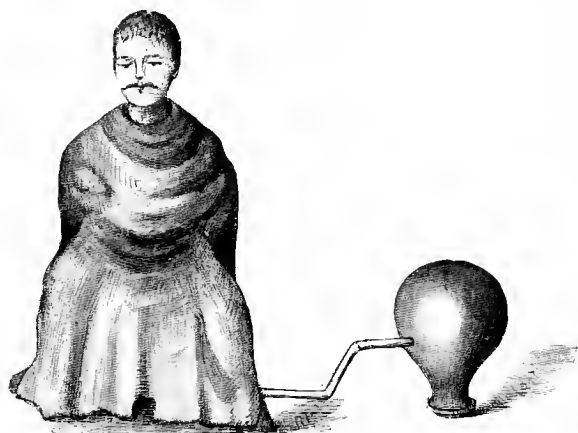
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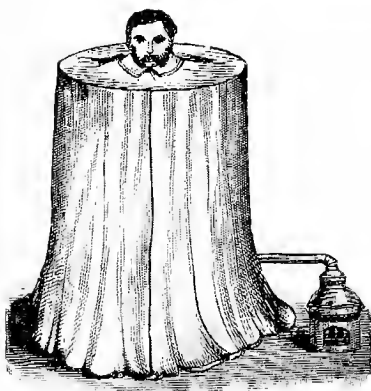
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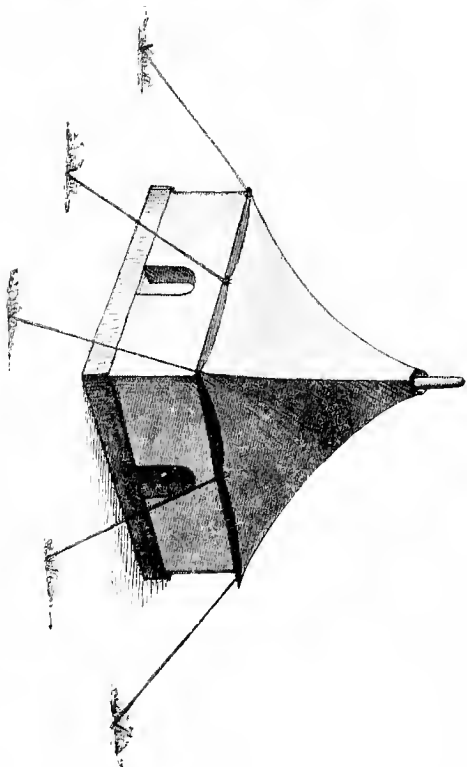
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